

## Hydropower Impact Analyses

Issue	Ownership	When			Elevate?	Type		Workplan Efforts
		Pref. Alt.	Final	Phase III		Decision	Process	
The power impact analyses in the Draft EIS/EIR do not adequately disclose Bay-Delta Program impacts to hydropower generation.	Western		X				X	This concern is being addressed by the Water Operations Economic Analysis Team. There is some concern that detail regarding water allocations and reservoir siting may be too sketchy to allow accurate analysis before completion of the Final EIS/EIR

## Storage and Conveyance

Issue	Ownership	When			Elevate?	Type		Workplan Efforts
		Pref. Alt.	Final	Phase III		Decision	Process	
There is concern that water operations modeling for the CVP is based on annual flows in the Trinity River of 340,000 AF, with the remainder being diverted into the Sacramento. If the Trinity Flow Study and fishery enhancement actions now in progress result in substantially higher flows, the CALFED modeling efforts for the Sacramento River and the Delta will be inaccurate for flows, temperature and water quality.	Western		X			X		Modeling efforts should reflect the most likely scenario for a flow decision on the Trinity. If the CALFED Program is dependent on Trinity diversions into the Sacramento, efforts should be made to preserve the diversions.

WESTERN AREA POWER ADMINISTRATION  
AGENCY ISSUES RELATED TO CALFED EIS/EIR  
6/11/98

**Hydropower Impact Analyses**

**Issue:** The power impact analyses contained in the Draft EIS/EIR do not adequately disclose Bay-Delta Program impacts to hydropower generation. Specific concerns are as follows:

- The envelope of potential impacts is too large to be useful to stakeholders or decision-makers in determining a course of action. Power impact analyses are not specific enough to allow power users to know whether they will in fact be affected and to what extent, especially for decisions postponed until Phase III of the CALFED Program.
- Assumptions underlying Power Impact Analysis are not disclosed in a way that would allow a reviewer to duplicate the results.
- Different assumptions were used for SWP and CVP (i.e. deregulated market in one case, not in the other).
- Ancillary services were omitted from the analysis.
- Significance criteria do not recognize customers' practice of using below market rates from CVP to offset above-market rates of renewables and other more costly generation technologies.
- The basis for determining Western's rates in the analyses is not disclosed.
- Mitigation strategies are not specific or effective at reducing power customers' risk of power resource reduction or rate increase.
- Power impact analyses to date have ignored effects on other affected hydropower generating utilities such as P.G.& E., M.I.D./T.I.D., Tri-Dam, etc.

**Resolution:** The shortcomings listed above need to be corrected. It is not enough to describe expected impacts. These impacts must be tied to actions. The actions may be tiered into general actions and specific actions, but they must be linked by cause and effect relationships. For example, timing of water releases will obviously affect power generation. But it is not enough to analyze different water release scenarios (e.g. baseload and peaking, diversions, supplemental releases) and consider the analyses sufficient. The water releases should be tied to specific actions that would trigger the different regimens. In this way a decisionmaker or stakeholder can see the chain of events that will unfold when a decision is made. Thus, the full analysis requires that specific decisions be tied to water management and operations scenarios, which then can be tied to changes in power generation and the aquatic environment, which then can be analyzed for

impacts to affected habitats, species, and segments of society, including power customers. This analysis should go so far as to examine replacement capacity and generation for lost power resources. Continue to refine water allocation assumptions and water operations scenarios to make them more closely reflect reality (narrow the envelope by using smaller ranges of values). Continue to refine economic impact analyses, and complete the efforts to tie the PROSIM Power Module to DWRSIM. Find tools to capture power impacts to other hydrogeneration resources such as MID/TID, PG&E, Tri-Dam, etc.

### **Water Storage and Conveyance**

**Issue:** There is concern that water operations modeling is based on annual flows in the Trinity River of 340,000AF, with the remainder being diverted into the Sacramento. The Trinity Mainstem Fishery Enhancement EIR/EIS now in preparation analyzes potential increases in Trinity flows, with a preferred alternative specifying Trinity flows at 750,000 AF (?verify number) which would correspondingly decrease flows in the Sacramento River. If Trinity flows increase by a significant amount, the water modeling done for the CALFED impact analyses, water quality and quantity projections, etc. for the Sacramento River and the Delta will be inaccurate.

**Resolution:** Support status flow or minimal increases in the Trinity, or re-run CALFED water operations models with revised assumptions to reflect likely outcome of Trinity flow decision by the Secretary of the Interior.

### **Ecosystem Restoration Program**

**Issue:** There is concern that the Ecosystem Restoration Program Plan does not include adequate description of the effects of stressors and ways to reduce them, nor the relative financial costs and biological benefits of various courses of action, to enable rational choices as to how best to apply Program funds. Naturally occurring stressors have not been adequately considered.

**Resolution:** Stressors should be described in terms of relative importance, cost of mitigation, effectiveness of mitigation, linkages with other stressors and ecosystem conceptual models, and likely effects on populations of targeted species based on extent of corrections. Natural stressors such as drought and floods should be factored into the conceptual models.

**Issue:** There is concern that adaptive management actions to improve the ecosystem may be taken in the future without adequate scientific certainty of biological benefits.

**Resolution:** This is an assurances issue. Where adaptive management actions will have adverse environmental, social, or economic consequences (third party impacts), such actions must have demonstrable and accepted scientific justification. Specific actions may require supplemental NEPA/CEQA analysis and documentation.